

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of	)	
Advanced Telecommunications Capability	)	
to All Americans in a Reasonable and Timely	)	GN Docket No. 07-45
Fashion, and Possible Steps to Accelerate	)	
Such Deployment Pursuant to Section 706	)	
of the Telecommunications Act of 1996	)	

**COMMENTS OF  
THE AMERICAN LIBRARY ASSOCIATION**

May 16, 2007

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## **Executive Summary**

The American Library Association (ALA) is the oldest and largest library association in the world, representing some 64,000 members. ALA strongly urges the commission to consider the crucial role that libraries play in providing the general public with access to Internet connectivity; 98% of libraries offer the public access to the Internet, which is particularly important in areas where broadband is not widely deployed or for segments of the population who cannot afford high-speed access. The public relies upon local public libraries as their primary source of broadband connectivity for a variety of purposes, including finding jobs, accessing e-government services, conducting health care research, and accessing emergency services.

There has been a general reliance upon market forces to meet broadband demands; we believe that the market is not meeting the demand of libraries for connectivity. Most public libraries require a reliable 1.5 mbps connection at a minimum, and larger libraries require even greater connectivity speeds. In terms of data collection, the FCC's current practice of collecting broadband deployment data on a zip code basis is not granular enough to provide libraries with sufficient information to make broadband choices.

The biggest problem faced by libraries is in the "last mile," the connection to the library's Internet provider. The ALA suggests that the FCC examine the experience of ConnectKentucky and similar programs to develop "best practices" concerning how to gather and publish detailed information concerning broadband connectivity, especially regarding the local ("last-mile") connection. The ALA believes that simply putting a question on the data gathering forms and asking each broadband provider what discounts it offers to public libraries alone could encourage the broadband providers to take more active efforts to meet the broadband demands of public libraries. We urge the Commission to reach out to other government agencies to develop and

implement a proactive national policy to promote broadband availability and affordability, especially to rural and tribal areas.

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**COMMENTS OF  
THE AMERICAN LIBRARY ASSOCIATION**

The American Library Association (ALA) is the oldest and largest library association in the world, representing some 64,000 members. ALA's members include primarily school, public, academic and some special librarians, as well as trustees, publishers and friends of libraries. ALA's mission is to provide leadership for the development, promotion and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all.

ALA is pleased to submit these comments in response to the Notice of Inquiry (NOI) concerning the deployment of advanced telecommunications to all Americans, as set forth in section 706 of the Telecommunications Act of 1996. The ALA applauds the Federal Communications Commission (FCC) for asking many important questions concerning the availability and pricing of broadband facilities, as well as the competitiveness of the broadband market.

The NOI, however, neglects to mention the importance of broadband services to public libraries and overlooks the critical role that public libraries serve.<sup>1</sup> Libraries fill a crucial role in providing the general public with access to Internet connectivity; 98% of libraries offer the public access to the Internet,<sup>2</sup> which is particularly important in areas where broadband is not widely deployed or for segments of the population who cannot afford high-speed access. Public libraries always have been, and continue to be, important centers of educational and economic opportunity for the public, and often provide access to computers and broadband Internet services that are otherwise unavailable to several sectors of our society.

Unfortunately, the marketplace is not satisfying the libraries' increasing needs for broadband connectivity to meet the demand and expectations of the public for Internet access. As demonstrated below, libraries' demand for high-speed and affordable broadband connections is not always met in today's market. A recent survey shows that 45% of public libraries do not have sufficient bandwidth to serve the public's needs at all times.<sup>3</sup> We encourage the Commission to inquire whether the needs of public libraries are being met in its ongoing efforts under Section 706 of the 1996 Telecommunications Act to determine "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."

The ALA is currently conducting studies of the state of broadband connectivity in libraries, the results of which will be available later this year. ALA looks forward to discussing the final results of these studies with the FCC.

## **I. PUBLIC LIBRARIES NEED MORE AFFORDABLE HIGH-SPEED BROADBAND CONNECTIONS.**

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<sup>1</sup> Several entities, including schools, were mentioned extensively throughout the NOI, but libraries, as places of public access, were not. See, for instance, para. 9 (mentioning "rural areas, schools, low-income populations, and minority groups."), and para. 28, which refers to "elementary and secondary schools and classrooms").

<sup>2</sup> Bertot, J. C. et al. (2006). Public Libraries and the Internet: 2006: Study Results and Findings. ("Public Libraries and the Internet") Available: [http://www.ala.org/ala/washoff/contactwo/oitp/2006\\_plInternet.pdf](http://www.ala.org/ala/washoff/contactwo/oitp/2006_plInternet.pdf)

<sup>3</sup> Ibid.

The Internet has transformed the manner in which individuals, businesses and government interact with one another. In this highly interconnected world, American economic and educational competitiveness is challenged as never before. Public libraries play an important role within their communities by helping the public adapt to this new technologically sophisticated environment.

The advent of broadband communications has enhanced the value of public libraries to the American public and increased libraries' roles as centers for learning and community activity. The public relies upon its local public libraries as their primary source of broadband connectivity. For instance:

- As local, state and federal governments are increasing reliance on e-government, the public uses their local public library to access government information and government services on the Internet. Additional information can be found in the attachment, an executive summary of a workshop held on E-Government and Public Libraries;<sup>4</sup>
- Libraries are central institutions within their communities and serve critical roles as disaster response facilities, as we saw evidenced after Hurricane Katrina;<sup>5</sup>
- Students use the public libraries' Internet services to complete homework assignments, download informational videos or course lectures, access scholarly journals, attend distance learning classes and collaborate with others on joint research projects;

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<sup>4</sup> McClure, C.R., et al. (2007). E-Government and Public Libraries: Current Status, Meeting Report, Findings, and Next Steps. Available Online: [http://www.ii.fsu.edu/announcements/e-gov2006/egov\\_report.pdf](http://www.ii.fsu.edu/announcements/e-gov2006/egov_report.pdf)

<sup>5</sup> Bertot, J. C., et al. (2006) Public access computing and Internet Access in public libraries: The role of public libraries in e-government and emergency situations. ("Public Libraries and E-government") *First Monday* 11(9), Available: [http://firstmonday.org/issues/issue11\\_9/bertot/index.html](http://firstmonday.org/issues/issue11_9/bertot/index.html)

- Farmers and other key figures in the rural economies in America rely on Internet connectivity from their local public library to acquire information and many other purposes. To allow rural communities to survive in these areas of low connectivity, libraries often provide economical and free to the public Internet access;
- Low-income people use public libraries to acquire information and apply for jobs, food stamps and other public assistance programs;
- Senior citizens find public libraries to be of enormous assistance in acquiring information on health issues, government programs and maintaining connections with family and friends who live far away.

Members of the public often have no other access to a computer, much less broadband connectivity. Owning a computer and keeping up with the technical and financial responsibilities of maintaining an Internet connection in the home may be overwhelming for the young, the elderly or those who have no technological experience. Public libraries offer the opportunity for consumers to walk into a library, sit down at a computer and immediately begin using the Internet without having to worry about acquiring a computer, subscribing to an Internet connection, connecting their computer to that connection and keeping up with the software changes that occur on a regular basis. When the public library takes care of these responsibilities on behalf of the consumer, it provides an enormous benefit to the community. According to a study published in 2002, individuals with lower annual income (below \$15,000) are more likely to rely upon usage of a computer at a library than people with higher levels of income (greater than \$75,000).<sup>6</sup>

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<sup>6</sup> Huertz, L. et al. (2002). Public Libraries and the Digital Divide: How Libraries Help. Available online: [http://www.gatesfoundation.org/NR/Downloads/libraries/eval\\_docs/pdf/PLDD\\_%20020729.pdf](http://www.gatesfoundation.org/NR/Downloads/libraries/eval_docs/pdf/PLDD_%20020729.pdf)

Public libraries have made a significant effort to meet the challenge of addressing the growing needs of their communities for Internet access. Public libraries have installed an average of 9.8 public access computers<sup>7</sup> and now offer computer training as a part of the basic services they provide to the public. While utilizing the Internet, the public often seeks assistance from library staff, as gatekeepers to information and as trusted sources. Libraries embrace the challenge of serving the public in the Information Age, and the public's response shows an increase in usage of libraries. According to data released by ALA, visits to public libraries were up a dramatic 60% between 1994 and 2004.<sup>8</sup> This counters the perception held by some that public libraries will become increasingly marginalized as Internet access becomes a more ubiquitous communications medium.

As free public access computing<sup>9</sup> grows in popularity, libraries are facing a demand for greater computer accessibility, which is outpacing their ability to acquire sufficient broadband connectivity to serve the needs of their patrons. The ALA recently conducted a survey of libraries' broadband connectivity, and the results are of significant concern. While 99% of public libraries have an Internet connection, in many cases this connection is inadequate to meet users' needs. Forty-four percent of public libraries reported that their bandwidth is insufficient to meet the needs of the public.<sup>10</sup> Furthermore, 33% of libraries provide wireless Internet access, with an additional 26% planning to make it available within the next year.<sup>11</sup> This highly valued service further strains the capacity of a library's Internet connection. We have every reason to believe that these

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<sup>7</sup> See, "Public Libraries and the Internet," supra.

<sup>8</sup> American Library Association. (2007). The State of America's Library Report , April, 2007. Available at <http://www.ala.org/ala/pressreleases2007/march2007/stateoflibraries.htm>

<sup>9</sup> Public libraries provide free, public access computing whereby a member of the public can access a computer, connection to the Internet, and, if available, staff to assist them as they use the computer.

<sup>10</sup> See, "Public Libraries and the Internet," supra.

<sup>11</sup> Ibid.



bandwidth problems will increase as library users access high-bandwidth applications in ever greater numbers.

Inadequate library connectivity results in very real problems for the public that use the library and for librarians. Most libraries already deal with significant wait times for use of public access terminals. Use of these terminals is often restricted to an hour or less, particularly during peak times. Inadequate connection speeds that result in longer download times compound this problem and create major problems for library users who are trying to accomplish tasks like filing their taxes online. It is not unusual at libraries across the country to see a library user whose session has timed out go to the back of the line so that he or she can complete their online business.

As a result, the ALA believes that the current marketplace is not serving the needs of public libraries and their patrons. The FCC needs to take more proactive steps to promote the availability of advanced telecommunications services. The ALA offers these comments in response to the FCC's specific questions in the hope that the FCC will take this opportunity to move forward with more specific proposals to spur broadband deployment and affordability.

## **II. THE FCC'S CURRENT DEFINITIONS OF BROADBAND CAPABILITIES ARE INADEQUATE.**

The FCC has used the threshold of 200 kbps to describe "advanced" services (both directions) and "high-speed" services (one direction) since 2004. This data rate is relatively slow compared to the data rates that are generally considered "broadband" in the marketplace and even in common parlance. A 2002 National Research Council report stated "The current generation of DSL technology aimed at residential consumers, ADSL, currently supports a typical maximum of 8 Mbps downstream and 800 kbps upstream."<sup>12</sup> Further, according to data from broadbandreports.com, service over the Cable system is marketed at several megabits per second

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<sup>12</sup> National Research Council. (2002). *Broadband: Bringing Home the Bits*. Washington, DC: National Academy Press.

download speeds. Thus, the FCC's use of the 200 kbps definition falls below even the lowest transmission rate for the two most popular broadband technologies.

The FCC's use of the 200 kbps in one direction threshold was adopted in 2004. There is substantial evidence that that rate has been eclipsed by the changes in the marketplace. Three years ago, many consumers were using broadband service to send and receive e-mails, download documents and view static web sites. Today, the content and communications being delivered over the Internet require higher speeds in both directions. For example, many web sites embed video clips onto web pages that require significantly more than 200 kbps capacity, and for libraries, with many public access computers, this need increases drastically.

Public libraries experience the need for higher-speed broadband firsthand. The vast majority of public libraries cannot meet their broadband needs with traditional DSL services. Most public libraries require a reliable 1.5 mbps connection at a minimum, and larger libraries require even greater connectivity speeds. Students require higher speeds to download video instructional materials and to engage in multi-lateral real-time communications with colleagues and teachers. Professionals wishing to telecommute, while on vacation or working from home, use library facilities to interact with colleagues in the office. These demands simply cannot be handled by 200 kbps data rates.

There are two problems with the existing definition of broadband. As discussed above, the first is that it is simply set too low. The second difficulty is that it is static. We believe that the FCC should consider adopting a more flexible definition of broadband that can more readily adapt to the changes in technology and consumer needs. Even if the Commission were to adopt a satisfactory definition of "broadband" services today, by setting a specific speed or capacity, that definition is likely to become obsolete within a few years. The Commission should consider

adopting a scalable definition that grows automatically based on consumer subscriptions or based on the time it takes to engage in certain transactions. Alternatively, the Commission could consider defining different levels of broadband similar to the different tiers of broadband connectivity set forth in the Fourth Order and contained in the current version of Form 477. We applaud the Commission's effort to assess broadband speeds in FCC WC Docket # 07-38. Whatever definition is chosen, we encourage the Commission to adopt a more dynamic approach than the current static approach.

### **III. THE COMMISSION MUST COLLECT MORE DETAILED DATA REFLECTING THE DEPLOYMENT AND AVAILABILITY OF BROADBAND FACILITIES ON A MORE LOCALIZED BASIS.**

The FCC's current practice of collecting broadband deployment data on a zip code basis is not granular enough to provide libraries with sufficient information to make broadband choices. The biggest problem faced by libraries is in the "last mile," the connection to the library's Internet provider. Obtaining an affordable and bandwidth sufficient local connection at the doorstep of the library's building (the "last mile") is often extremely difficult. It is of little use to the library if there are other last mile broadband connections available elsewhere in the zip code but not in the library's neighborhood.

During the course of its research into how to increase broadband deployment to public libraries, the ALA spent some time examining the ConnectKentucky program. The program has received accolades from many organizations for the way that it works with the broadband companies to provide detailed maps of broadband facilities. This service has given potential consumers of these services much greater options for determining how to connect to these facilities. The ALA suggests that the FCC examine the experience of ConnectKentucky and similar programs to develop "best practices" concerning how to gather and publish detailed

information concerning broadband connectivity, especially regarding the local (“last-mile”) connection.

**IV. THE FCC SHOULD CONSIDER ASKING BROADBAND PROVIDERS TO OFFER DISCOUNTED PRICES FOR ORGANIZATIONS SUCH AS PUBLIC LIBRARIES WHOSE MISSION IS TO SERVE THE LOCAL COMMUNITY.**

The FCC has asked for comment on the pricing of broadband services and for suggestions about what pricing structures could affect broadband deployment. The ALA recognizes that the prices for broadband facilities have largely been removed from federal regulation. Nevertheless, the ALA believes that it would be valuable for the FCC to encourage broadband providers to offer discounted rates to public institutions such as public libraries that serve the interests of the greater community. Our experience is that the providers of broadband capacity are often unaware of the significant broadband needs of libraries, and that greater coordination and conversation can often help the providers understand libraries’ needs, and vice versa. Public libraries are long-term users of bandwidth and may serve as anchor tenants, thereby reducing the risk for service providers as they move into new territories. One way to encourage such dialog between our communities is for the FCC to encourage the broadband providers to offer a discounted rate for certain public institutions that would entice further conversation.<sup>13</sup> Such discounted rates could help to “prime the pump” of broadband usage, and would often lead to even greater broadband purchases and capabilities by the entire community. The ALA believes that simply putting a question on the data gathering forms and asking each broadband provider what discounts it offers to entities, such as

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<sup>13</sup> The ALA believes that the current subsidies provided by the schools and libraries portion of the universal service fund (i.e. the “E-rate”) has been one of the most effective policies for stimulating broadband deployment. The availability of these funds has helped many libraries connect to the Internet that would not otherwise be able to do so. These funds have also given incentives to broadband providers to build out facilities to public libraries because they had confidence that the libraries’ funding was available. Nevertheless, many public libraries are unable to gain access to these subsidies, and additional incentives are needed to satisfy the statutory directive that “all” Americans have access to advanced services.

public libraries, alone could encourage the broadband providers to take more active efforts to meet the broadband demands of public libraries.

**V. THE COMMISSION SHOULD COORDINATE WITH OTHER GOVERNMENT AGENCIES TO SPEED THE DEPLOYMENT OF AFFORDABLE BROADBAND SERVICES TO RURAL AND TRIBAL AREAS.**

The Commission asks in paragraph 32 what actions it can take to accelerate deployment. First of all, the Commission should begin by recognizing that the issue of broadband deployment is a complex, multi-faceted issue that is not likely to be addressed successfully by a single government agency acting in isolation. Congress, the Department of Commerce, the Department of Agriculture, state governors, legislators, regulators, municipal officials and economic development offices all play important roles in creating the right conditions to promote broadband services. In our view, these government agencies must work together to create a national broadband policy and implementation strategies.

It is past the time when the U.S. can sit back and simply “let the marketplace work.” For several years, we have watched the U.S. international standing decline in comparison to other nations. While the solutions being adopted by countries ahead of the U.S. in broadband rankings vary somewhat, the one feature they share is a recognition that the federal government must take an active role to promote broadband. Further, as demonstrated in Kentucky, partnering with the private sector to form public/private partnerships is encouraged. We urge the Commission to reach out to other government agencies to develop and implement a proactive national policy to promote broadband availability and affordability, especially to rural and tribal areas.

Respectfully Submitted,

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## **E-Government and Public Libraries: Current Status, Meeting Report, Findings, and Next Steps**

By

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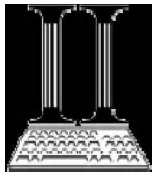
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**PRELIMINARY DISCUSSION DRAFT**



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## EXECUTIVE SUMMARY

This report provides an overview of the current role of public libraries in the access to and dissemination of E-government services. Public libraries function as a first choice, first refuge, and last resort in a range of E-government and emergency and circumstances, allowing individuals to engage successfully in essential E-government services such as registering for Medicare or other benefits and filing tax information. With their key centrality as agents of government services, public librarians increasingly play significant roles in times of emergencies, like the aftermath of a hurricane, in which communities rely on the public library Internet access to request aid, try to find missing family and friends, file Federal Emergency Management Agency (FEMA) insurance claims and other forms, and begin rebuilding their lives.

The purpose of this report is to provide a comprehensive overview of activities and research to date by the Information Institute, the Florida State Library, and the ALA Washington Office on the general topic of E-government and the role of public libraries. The report provides an overview of the general topic, results of the survey administered in Florida, a brief literature review, and results/findings from the December 2006 meeting that identified key issues and offered a number of recommendations for next steps. More specifically, the goals of this report are to:

- Increase government officials, the public's, and public librarians' awareness of the importance of public libraries in providing access to and dissemination of E-government services and resources;
- Identify and discuss a number of key issues related to the role of public libraries in E-government;
- Identify research topics that require additional investigation; and
- Offer recommendations for improving the effectiveness by which public libraries can participate in the provision of E-government services.

Ultimately, the authors hope that this report will be a springboard from which additional initiatives and strategies can be developed to improve the delivery of E-government services to all individuals in the United States.

The report offers a number of strategies by which public libraries can play a more effective role in the access to and dissemination of E-government services including better planning and cooperation with government agencies, obtaining better training and information about E-government services, developing and/or expanding their organizational structure and planning to provide E-government services and emergency preparedness, and improved communication with federal, state, and local government agencies regarding the nature and type of E-government services currently being offered from those agencies. In addition, the report recommends beginning a process to develop legislation to amend the *E-government Act of 2002* to better coordinate E-government services with public libraries and other public/volunteer agencies for the benefit of the American people.